



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 8**

1595 Wynkoop Street
Denver, CO 80202-1129
Phone 800-227-8917
www.epa.gov/region08

Ref: 8EPR-N

JAN 09 2017

Scott Fitzwilliams, Forest Supervisor
c/o Roger Poirier, Project Leader
White River National Forest
900 Grand Avenue
Glenwood Springs, CO 81601

Re: Draft Environmental Impact Statement for the Snowmass Multi-Season Recreation Projects,
White River National Forest, CEQ # 20160281

Dear Supervisor Fitzwilliams:

The U.S. Environmental Protection Agency Region 8 has reviewed the U.S. Department of Agriculture Forest Service (USFS) Draft Environmental Impact Statement (EIS) for the proposed Snowmass Ski Area (Snowmass) Multi-Season Recreation Projects consistent with the 2015 Snowmass Mountain Master Development Plan (SMMDP). Snowmass is located on the White River National Forest (WRNF) in Pitkin County, Colorado. Our review was conducted in accordance with the EPA's responsibilities under Section 102 of the National Environmental Policy Act (NEPA), and Section 309 of the Clean Air Act (CAA).

Project Description

There are two action alternatives in addition to the No Action alternative. Alternative 2, the Proposed Action, includes: 1) new and realigned mountain biking trails; 2) realigned hiking trails, 3) a mountain coaster; 4) a zip-line canopy tour; 5) a zip line; 6) a ropes challenge course; 7) a climbing wall; and 8) three multi-purpose activity areas. All of the proposed projects would occur within the resort's existing Special Use Permit area located within the developed portion of the ski area. Alternative 3 includes all of the projects identified in the Proposed Action, but was modified to respond to wildlife, recreation and scenery issues. We note that with Alternative 3, there are additional impacts to other resources, particularly to wetlands. The USFS has not yet identified a Preferred Alternative.

The Draft EIS also noted adjustments were made to the proposed projects in response to information gained during field visits to the study area. These changes include an alternate alignment for the zip line canopy tour that includes fewer towers and a shorter overall length, as well as modifications to mountain biking and hiking trail alignments in areas that were in close proximity to wetlands or streams.

Comments and Recommendations

Aquatic Resources

The EPA considers protection of aquatic resources to be among the most important issues to be addressed in the NEPA analysis for these types of project activities. The Draft EIS states that there will be wetland and watershed impacts associated with the action alternatives. However, no irreversible or irretrievable impacts to stream and riparian resources have been identified.

Wetlands: Although a water resources map was included in the Draft EIS, the scale does not provide sufficient detail to understand the impacts to various types of wetland plant communities from proposed ski area features. Larger scale maps are necessary to more fully disclose impacts from specific ski area features and to assist with future avoidance and minimization efforts with final design. We recommend the Final EIS include 1 inch equals 100 feet scale mapping for wetland plant communities impacted by ski area features, illustrating direct, indirect/secondary, temporary, and vegetation removal types of impacts.

The Draft EIS (see p. 3-196) describes impacts of 11 wetlands crossings within the ski area as a sum total of 469 linear feet for the Proposed Action, Alternative 2. Alternative 3 includes 16 wetland crossings impacting 942 linear feet. (Please note that on page 2-49, Table 2-4 states that there are 14 and 19 crossings for Alternatives 2 and 3, respectively.) The Draft EIS also notes that attempts will be made prior to construction to field adjust the locations of these features to avoid wetlands. If avoidance is not possible, trails will be bridged or constructed with boardwalks to avoid fill material in wetlands. We agree that these measures are preferable to filling of wetlands but do not agree that these practices would avoid changes to the overall wetland functions and values as asserted in the Draft EIS. Despite the minor impacts to wetlands associated with these crossings, the cumulative effect of numerous piecemeal changes resulting from crossings (and adverse impacts to wetland vegetation under boardwalks, bridges, etc.,) may result in a major impairment of the aquatic resources and interfere with habitat productivity. We recommend that mitigation for loss of habitat associated with the potential for adverse impacts to wetlands vegetation be quantified and disclosed in the Final EIS to adequately address requirements in the Wetlands Protection Executive Order 1990.

Water Quality: We note that there are no stream segments within the analysis area that are listed on the Colorado State 303(d) list as impaired streams under the CWA; however, we have some concerns regarding potential impacts to water resources. We recommend that a monitoring plan be designed and implemented to measure the effectiveness of proposed mitigation. Additional details are provided below.

Stream Health

The Draft EIS acknowledges that disturbance to the water influence zone (WIZ) has a direct effect on stream health metrics, such as large woody debris (LWD) and fine sediments. Although there are management measures and project design criteria in place that require new concentrated-use sites be located outside the WIZ if practicable, the project will result in vegetation/tree removal as well as grading within the WIZ (DEIS p. 3-183). This is particularly concerning in locations that are rated as "Diminished" for bank stability and areas where observance of fine sediment has been qualitatively assessed (see the Existing Stream Health Section p. 3-178) as these management actions could negatively affect stream health.

The WRENS hydrologic model was used for this Draft EIS to generate a water balance using seasonal precipitation and vegetation type and density, and then computes the amount of water potentially available for runoff. The model computations show that water yields and peak streamflow rates under average climatic conditions would increase between 0.2 and up to 2 percent as a consequence of the projected tree removal for the proposed projects. We are concerned that increased peak flows have the potential to exacerbate the unstable banks conditions and increase sediment transport. Further, the Draft EIS states that during a typical wet year, the study watersheds may produce an annual yield approximately 57 percent higher than the average, and peak flows may increase more than 32 percent.

We recommend tree removal and grading be avoided within the WIZ to the greatest extent possible due to the potential for increased sedimentation and negative affects to bank stability as a result of terrain grading, tree removal and increased water yields influenced by vegetative clearing and snowmaking. These activities could affect the intensity and timing of peak flows during the runoff season. However, if impacts cannot be avoided, it is important to include monitoring as part of the mitigation and project design details for this type of project in the Final EIS. Further detailed recommendations are offered below.

In summary, the proposed projects would involve tree removal and terrain grading within the study watersheds, including in the WIZ, which may negatively affect stream health. Additionally, increased peak flows/water yields could further degrade unstable banks that are currently at-risk. As a result, project design criteria (PDC) have been incorporated into the action alternatives in order to minimize potential impacts from construction and implementation of any approved projects (see Table 2-2). However, the Draft EIS does not include information on a monitoring protocol to assess how effective the PDC will be in preventing downstream degradation of stream health.

Recommended Design Features and Monitoring

While we support the efforts of the USFS to avoid and minimize impacts through PDC, we also recommend and support the development of an adaptive management and monitoring framework to define monitoring questions and protocols, require annual monitoring review and evaluation of project effects, and adjust management towards desired conditions throughout and subsequent to the project implementation period. At a minimum, we recommend expanding protective measures to include monitoring requirements of critical metrics including percent fine sediments and bank stability. If there are issues with aquatic biota, then we recommend including MMI scores (Colorado Multi Metric Index of instream biological integrity calculated from a benthic invertebrate data sample). We recommend that monitoring continues annually for several years after the projects are implemented to ensure that upstream activities are not exacerbating the current “diminished” bank stability rating and potential sediment problem.

Air Quality Resources

We note that the USFS used EPA’s MOVES2014a model and estimated predicted air emissions associated with the Snowmass project, which is a valuable addition to the Draft EIS analysis. With the inclusion of the modeling results in the Draft EIS, we do not have any comments regarding the air quality analysis.

Other Considerations

Special-Status and Threatened and Endangered Species: The analysis considered federal, state and local species of concern. It was determined that the project area may contain special status species, including Endangered Species Act listed threatened species, endangered species, and/or their designated critical habitat. These include four endangered fish (humpback chub, bonytail chub, Colorado pikeminnow, razorback sucker) and the Canada Lynx. We understand that the Section 7 consultation, including a prepared Biological Assessment/Biological Evaluation, is detailed in the project file. To best inform the decision-maker and the public, we recommend the NEPA documentation include any substantial USFWS recommendations to reduce potential impacts to these species including project design criteria, mitigation, conservation measures and monitoring measures. The results of the USFWS discussions and subsequent recommendations will be a valuable addition to the Final EIS.

EPA Rating

Consistent with Section 309 of the CAA, it is the EPA's responsibility to provide an independent review and evaluation of the potential environmental impacts of this project. Based on the procedures the EPA uses to evaluate the adequacy of the information and the potential environmental impacts of the Preferred Alternative, the EPA is rating the Draft EIS as Environmental Concerns – Insufficient Information (EC-2). The "EC" rating indicates that the EPA review has identified environmental impacts that need to be avoided in order to fully protect the environment. The "2" rating indicates that the EPA has identified additional information, data, analyses, or discussion that we recommend for inclusion in the Final EIS. A description of the EPA's rating system can be found at: <https://www.epa.gov/nepa/environmental-impact-statement-rating-system-criteria>.

We appreciate the opportunity to participate in the review of this project, and are committed to working with you as you prepare the Final EIS. If we may provide further explanation of our comments during this stage of your planning process, please contact me at 303-312-6704, or your staff may contact Melanie Wasco, Lead NEPA Reviewer, at 303-312-6540.

Sincerely,



Philip S. Strobel
Director, NEPA Compliance and Review Program
Office of Ecosystems Protection and Remediation